

separate, coding nucleotide sequences and the coded amino acid sequences of the compounds of the formulas I or II.

~~18~~ ¹⁸ 48. Use of the coding nucleotide sequences of the compounds of the formulas I or II for the production of recombinant proteins.

19 ~~50~~. Use of proteins with the coded amino acid sequences of the compounds of the formulas I or II as targets for the development of pharmaceutical drugs, for example for the inhibition or the enhancement of the catalytic activity of the coded proteins of the formulas I or II.

~~20~~ ²⁰ 51. Use of the species-homologous proteins of the compounds of the formulas I or II as targets for the development of pharmaceutical drugs, for example for the inhibition or the enhancement of the catalytic activity of the coded proteins of the formulas I or II.

~~21~~ ²¹ 52. Use of the proteins with the coded amino acid sequences of the compounds of the formulas I or II for the

spatial structure determination, for example the spatial structure determination by means of crystallography or nuclear resonance spectroscopy.

✓ ~~22~~ 53. Use of the coded amino acid sequences of the compounds of the formulas I or II for the prediction of the protein structure by means of computerized protein structure prediction methods.

✓ ~~23~~ 54. Use of the spatial structure of the coded amino acid sequences of the compounds of the formulas I or II as targets for the development of pharmaceutical drugs, for example for the inhibition or the enhancement of the catalytic activity of the coded proteins of the compounds of the formulas I or II.

✓ ~~24~~ 55. Use of the coding nucleotide sequences of the compounds of the formulas I or II in gene therapeutical applications in humans and in animals, as for example as parts of gene therapy vectors as for example as parts of artificial chromosomes.

24. 52. Use of the coded amino acid sequences of the compounds of the formulas I or II as antigens for the production of antibodies, as for example antibodies that inhibit or promote the protease function or antibodies that can be used for immunohistochemical studies.

~~27.~~ 58. Use of the coding nucleotide sequences of the compounds of the formulas I or II for the production of transgenic animals, as for example transgenic mice.

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21 ~~60~~. Use of the compounds of the formulas I or II for the diagnostics of disorders in the gene corresponding to the compound of the formula I.

30: ~~61~~. Use of the coding nucleotide sequences of the compounds of the formulas I or II as a starting sequence for gene technological modifications aimed at the production of pharmaceutical compositions or gene therapy vectors which exhibit changed properties as compared with the corresponding pharmaceutical compositions or gene therapy vectors containing the coding nucleotide sequence of the compounds of formulas I or II, for example changed proteolytic activity, changed proteolytic specificity, or changed pharmacokinetic characteristics.--

REMARKS

Support for the new claims can be found, at least, in original claims 1-46.